

Claims

1. A method for transferring a data flow by creating a connection on a packet radio service of a telecommunication system, said connection constituting a packet data channel, wherein the data flow comprises at least one active data transfer period, **characterised** in that information is transferred between the mobile station and the network on whether after the active data transfer period a passive period starts or whether a connection release is allowed.
- 5 2. A method according to claim 1, **characterized** in that said information is transferred during the active data transfer period.
- 10 3. A method according to claim 1, **characterised** in that said information is transferred on the packet data channel.
- 15 4. A method according to claim 3, **characterised** in that the data flow is arranged to consist of data blocks, and said information is transferred in a header of a data block.
- 20 5. A method according to claim 4, **characterised** in that the radio service is GPRS and the header is a MAC header of a RLC block.
- 25 6. A method according to claim 1, **characterised** in that it comprises the step of creating a control connection between the mobile station and the network, said control connection being separate from said packet data channel and constituting a control channel, wherein said information is transferred on the control channel.
- 30 7. A method according to any of claims 1-6, **characterised** in that when the same packet data channel is allocated for more than one connection of delay sensitive data, all such connections having a passive period, and when a first connection changes to an active transfer period, a second connection is reallocated to another packet data channel.
- 35 8. A method according to claim 7, **characterised** in that said second connection is reallocated to another packet data channel essentially immediately after said first connection has become active.

9. A method according to claim 7, **characterised** in that said second connection is reallocated to another packet data channel, when said second connection becomes active.
- 5 10. A method according to any of the previous claims, **characterised** in that when a passive data transfer period follows an active data transfer period, the network allocates a number of transmit permissions that can be allocated to other temporary block flows on the packet data channel.
- 10 11. A method according to any of the previous claims, **characterised** in that when allocating data transfer resources for a first direction (uplink/downlink) of packet data transfer, resources are also allocated for packet data transfer of the opposite data transfer direction.
- 15 12. A method according to claim 11, **characterised** in that the resource allocation in the opposite data transfer direction is initialised with a message between the mobile station and the network.
- 20 13. A method according to any of the previous claims, **characterised** in that when releasing a temporary block flow in a first direction (uplink/downlink) of packet data transfer, a temporary block flow in the opposite data transfer direction is maintained at least for a predetermined time.
- 25 14. A method according to any of claims 1-12, **characterised** in that the release of the downlink temporary block flow is initialised with a message between the mobile station and the network.
- 30 15. A method according to any of the previous claims, **characterised** in that the network is informed on whether the packet data to be transferred is delay sensitive.
- 35 16. A telecommunications system for transferring a data flow by creating a connection on a packet radio service, wherein the data flow comprises at least one active data transfer period, **characterised** in that the cellular communications system comprises means for receiving information on whether after the active data transfer period a passive period starts or whether a connection release is allowed.
17. A telecommunications system according to claim 16, **characterised** in that the system comprises means for allocating the same packet data channel for at least two

connections of delay sensitive data, both connections comprising a passive period, and means for reallocating a second connection to another packet data channel after a first connection becomes active.

- 5 18. A mobile station for transferring a data flow by creating a connection on a packet radio service to a cellular telecommunications system, wherein the data flow comprises at least one active data transfer period, **characterised** in that the mobile station comprises means for transmitting information on whether after the active data transfer period a passive period starts or whether a connection release is allowed.
- 10 19. A mobile station according to claim 18, **characterised** in that the means for transmitting the information comprises means for transmitting the information in the MAC header of a RLC block in GPRS.
- 15 20. A method for transferring a data flow by creating a connection on a packet radio service of a telecommunication system, wherein the data flow comprises at least one active data transfer period, **characterised** in that after an active data transfer period the connection is maintained for a predetermined time, whereafter the connection is released.
- 20